



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/240,563	01/29/1999	DAVID J. BOOTHBY	05110/003004	7489
26161 7590 07/12/2007 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022				
			EXAMINER ABEL JALIL, NEVEEN	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 07/12/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/240,563

Applicant(s)

BOOTHBY, DAVID J.

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 6/1/2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26-April-2007 has been entered.
2. The amendment filed on 1-June-2007 has been received and entered. Claims 1-21 have been cancelled. Claims 22-31 have been newly added. Therefore, claims 22-31 are now pending.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everson et al. (U.S. Patent No. 5,261,094) in view of Shaheen et al. (U.S. Patent No. 5,434,994).

As to claim 22, Everson et al. discloses a data processing method comprising:  
synchronizing data records of a plurality of disparate databases (See Everson et al. column 1, lines 38-40), wherein synchronizing comprises:

providing a status file comprising data records reflecting contents of data records existing in at least one of the disparate databases at a time of a prior synchronization (See Everson et al. column 1, lines 60-67, and see Everson et al. column 2, lines 1-2);

updating the first and second databases based on an outcome of the comparing step synchronization (See Everson et al. column 3, lines 50-66); and

updating the data records of the status file to reflect the contents of the data records in the first and the second of the plurality of disparate databases after the disparate databases have been updated (See Everson et al. column 3, lines 50-66).

Everson et al. discloses the claimed invention but does not explicitly teach comparing data records from at least one of a first and a second of the plurality of disparate databases to corresponding data records of the status file to determine whether data records of the plurality of disparate databases have changed or been deleted since the prior synchronization or whether there are new data records since the prior synchronization; nor does it explicitly teach wherein at least the data records of the first and the second databases are without unique identification codes. Although, Everson et al. does teach querying for updates since last synchronization by tracking date/time of updates (See column 1, lines 56-67, and column 2, lines 1-2, wherein “status file” reads on “control table”).

Shaheen et al. teaches comparing data records from at least one of a first and a second of the plurality of disparate databases to corresponding data records of the status file to determine whether data records of the plurality of disparate databases have changed or been deleted since the prior synchronization or whether there are new data records since the prior synchronization (See Shaheen et al. column 7, lines 41-55); and

wherein at least the data records of the first and the second databases are without unique identification codes (See Shaheen et al. column 7, lines 26-35, wherein the unique code is for each record that is being replicated NTO each record in the database).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Everson et al. by the teachings of Shaheen et al. to include comparing data records from at least one of a first and a second of the plurality of disparate databases to corresponding data records of the status file to determine whether data records of the plurality of disparate databases have changed or been deleted since the prior synchronization or whether there are new data records since the prior synchronization because it allows for coherency and less processing in performing needed synchronization (See Shaheen et al. column 1, lines 32-36, and see Shaheen et al. column 2, lines 55-56). It also would have been obvious to include wherein at least the data records of the first and the second databases are without unique identification codes because it provides for different way of tracking updates and management of replicas (See Shaheen et al. column 1, lines 63-66).

As to claim 23, Everson et al. discloses a data processing method comprising:

synchronizing data records of a plurality of disparate databases, wherein synchronizing comprises (See corresponding rejection above in claim 22):

providing a status file containing data records reflecting the contents of data records existing in at least one of the disparate databases at the time of a prior synchronization (See corresponding rejection above in claim 22);

updating the first and second databases based on an outcome of the comparing step (See corresponding rejection above in claim 22); and

updating the data records of the status file to reflect the contents of the data records in the first and the second of the plurality of disparate databases after the disparate databases been updated (See corresponding rejection above in claim 22);

wherein at least the data records of the first database are identified by unique identification codes (See Everson et al. column 3, lines 7-11).

Everson et al. discloses the claimed invention but does not explicitly teach comparing data records from at least one of a first and a second of the plurality of disparate databases to corresponding data records of the status file to determine whether data records of the plurality of disparate databases have changed or been deleted since the prior synchronization or whether there are new data records since the prior synchronization. Although, Everson et al. does teach querying for updates since last synchronization by tracking date/time of updates (See column 1, lines 56-67, and column 2, lines 1-2, wherein “status file” reads on “control table”).

Shaheen et al. teaches comparing data records from at least one of a first and a second of the plurality of disparate databases to corresponding data records of the status file to determine whether data records of the plurality of disparate databases have changed or been deleted since the prior synchronization or whether there are new data records since the prior synchronization (See Shaheen et al. column 7, lines 41-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Everson et al. by the teachings of Shaheen et al. to include comparing data records from at least one of a first and a second of the plurality of

Art Unit: 2165

disparate databases to corresponding data records of the status file to determine whether data records of the plurality of disparate databases have changed or been deleted since the prior synchronization or whether there are new data records since the prior synchronization because it allows for coherency and less processing in performing needed synchronization (See Shaheen et al. column 1, lines 32-36, and see Shaheen et al. column 2, lines 55-56).

As to claim 24, Everson et al. as modified discloses the method of claim 22 or 23 wherein the correspondence between data records of the first and second databases is achieved by comparing key fields of the databases (See Everson et al. column 3, lines 7-11).

As to claim 25, Everson et al. as modified discloses the method of claim 23 wherein data records of the status file are identified by the unique identification code of the first database (See Everson et al. column 3, lines 7-11, also see Shaheen et al. column 8, lines 38-42).

As to claims 26, and 27, Everson et al. as modified discloses the method of claim 22, 23, or 25 wherein the comparing step further comprises deciding whether to delete a data record from the first database based on the comparing step having determined that a corresponding record of the second database has been deleted since the prior synchronization (See Everson et al. column 3, lines 7-16, also see Shaheen et al. column 7, lines 22-40).

As to claims 28, and 29, Everson et al. as modified discloses wherein the first of the plurality of disparate databases comprises at least one of a first data structure, a first application

software, or a first computer program that is different from a second data structure, a second application software, or a second computer program of the second of the plurality of disparate databases (See Everson et al. column 2, lines 44-54, also see Shaheen et al. column 6, lines 6-17).

As to claims 30, and 31, Everson et al. as modified discloses wherein the prior synchronization occurs between the at least one of the first and the second of the plurality of databases (See Shaheen et al. column 7, lines 22-40).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 22-31 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DeLome et al. (U.S. Patent No. 4,819,156) teaches database journalizing for multiple databases recovery.

Baker et al. (U.S. Patent No. 5,621,795) teaches fault tolerance in two servers using log files.



7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Neeven Jalil', with a large, sweeping loop at the end.

Neeven Abel-Jalil  
July 1, 2007